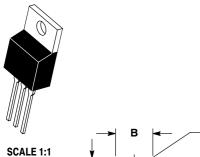
MECHANICAL CASE OUTLINE





TO-220 CASE 221A-09 **ISSUE AF**

DATE 26 NOV 2007

NOTES:

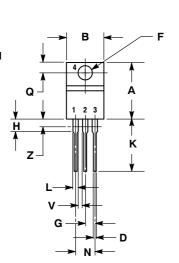
- NOTES:

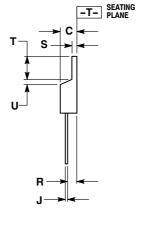
 1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.

 2. CONTROLLING DIMENSION: INCH.

 3. DIMENSION Z DEFINES A ZONE WHERE ALL BODY AND LEAD IRREGULARITIES ARE ALLOWED.

	INCHES		MILLIMETERS		
DIM	MIN	MAX	MIN	MAX	
Α	0.570	0.620	14.48	15.75	
В	0.380	0.405	9.66	10.28	
C	0.160	0.190	4.07	4.82	
D	0.025	0.035	0.64	0.88	
F	0.142	0.161	3.61	4.09	
G	0.095	0.105	2.42	2.66	
Н	0.110	0.155	2.80	3.93	
J	0.014	0.025	0.36	0.64	
K	0.500	0.562	12.70	14.27	
L	0.045	0.060	1.15	1.52	
N	0.190	0.210	4.83	5.33	
Q	0.100	0.120	2.54	3.04	
R	0.080	0.110	2.04	2.79	
S	0.045	0.055	1.15	1.39	
T	0.235	0.255	5.97	6.47	
U	0.000	0.050	0.00	1.27	
٧	0.045		1.15		
Z		0.080		2.04	





STYLE 1: PIN 1. 2. 3. 4.		3.	BASE EMITTER COLLECTOR EMITTER	STYLE 3: PIN 1. 2. 3. 4.	ANODE GATE	STYLE 4: PIN 1. 2. 3. 4.	MAIN TERMINAL 1 MAIN TERMINAL 2 GATE MAIN TERMINAL 2
STYLE 5: PIN 1. 2. 3.	DRAIN	2. 3.	ANODE CATHODE ANODE CATHODE	STYLE 7: PIN 1. 2. 3.	ANODE CATHODE	3.	CATHODE ANODE EXTERNAL TRIP/DELAY ANODE
STYLE 9: PIN 1. 2. 3. 4.		STYLE 10: PIN 1. 2. 3.		STYLE 11: PIN 1. 2. 3. 4.	DRAIN	STYLE 12: PIN 1. 2. 3. 4.	

	DOCUMENT NUMBER:	98ASB42148B	
0	STATUS:	ON SEMICONDUCTOR STANDARD	
	NEW STANDARD:		
	DESCRIPTION:	TO-220	

Electronic versions are uncontrolled except when accessed directly from the Document Repository. Printed versions are uncontrolled except when stamped "CONTROLLED COPY" in red.



DOCUMENT	NUMBER:
98ASB42148	В

PAGE 2 OF 2

ISSUE	REVISION	DATE				
AB	CHANGED MINIMUM DIMENSION FOR S FROM 0.045 (1.15) TO 0.020 (0.508). REQ. BY W. LOW.	04 MAY 2006				
AC	INTERNAL REVISION IN DDCM	30 MAY 2006				
AD	REVERSED CHANGES FROM REVISION AB. RETURNED DIMENSION S TO DUAL GAUGE VALUES. REQ. BY M. SCHAGER.	17 JUL 2006				
AE	CHANGED MAXIMUM DIMENSION F FROM 0.147 INCH (3.73MM) TO 0.16 1INCH (4.09MM) AND MINIMUM DIMENSION FOR J FROM 0.018 INCH (0.46MM) TO 0.014 INCH (0.36MM). REQ. BY M. SCHAGER.	13 APR 2007				
AF	ADDED STYLE 12. REQ. BY A. ANGUS.	26 NOV 2007				

ON Semiconductor and a registered trademarks of Semiconductor Components Industries, LLC (SCILLC). SCILLC reserves the right to make changes without further notice to any products herein. SCILLC makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does SCILLC assume any liability, arising out of the application or use of any product or circuit, and specifically disclaims any and all liability, including without limitation special, consequential or incidental damages. "Typical" parameters which may be provided in SCILLC data sheets and/or specifications can and do vary in different applications and actual performance may vary over time. All operating parameters, including "Typicals" must be validated for each customer application by customer's technical experts. SCILLC does not convey any license under its patent rights nor the rights of others. SCILLC products are not designed, intended, or authorized for use as components in systems intended for surgical implant into the body, or other applications intended to support or sustain life, or for any other application in which the failure of the SCILLC product could create a situation where personal injury or death may occur. Should Buyer purchase or use SCILLC products for any such unintended or unauthorized application, Buyer shall indemnify and hold SCILLC and its officers, employees, subsidiaries, affiliates, and distributors harmless against all claims, costs, damages, and expenses, and reasonable attorney fees arising out of, directly or indirectly, any claim of personal injury or death associated with such unintended or unauthorized use, even if such claim alleges that SCILLC was negligent regarding the design or manufacture of the part. SCILLC is an Equal Opportunity/Affirmative Action Employer. This literature is subject to all applicable copyright laws and is not for resale in any manner.